

AMENDMENTS TO THE CLAIMS

1.-7. (cancelled)

8. (previously presented) A method of providing access to one or more services within a Digital TV Application Software Environment (DASE), the method comprising:

receiving a transport stream having content and one or more applications, wherein the one or more applications provide the one or more services within the Digital TV Application Software Environment (DASE);

using a renderer to interpret and prepare the content for rendering on a display device;

mapping at least one XXML document to a Document Object Model (DOM) structure, the XXML document having at least one atomic element defined as a “tag” and the DOM having an atomic element defined as a “node;” and

using a declarative application program interface to access Program System Information Protocol (PSIP) data, wherein the declarative application program interface comprises an XXML application program interface module that introduces new tags having semantics that enable HTML pages to perform an active dynamic discovery of at least one of (i) the content and (ii) the services, wherein the XXML application program interface module includes a rule structure for:

defining a condition within the node;

upon satisfaction of the condition, realizing an action defined by the at least one tag, which action is found within the PSIP data; and

otherwise, realizing an action defined by the node.

9. (original) The method according to claim 8 further comprising the step of rendering the XXML document based on the realized action.

10. (previously presented) The method according to claim 8 wherein the mapping step comprises identifying all tables via a master guide table.

11. (currently amended) The method according to claim 10 further comprising the steps of:

defining an object class for each table identified;

parsing each table;

for each parsed table, constructing an object instance;

generating a DOM root document object;

adding ~~each~~a virtual channel as a child of the DOM root document object; and

adding ~~each~~an event information table as a child of a virtual channel table based on source ID.

12. (previously presented) The method according to claim 8 further comprising the step of rendering the realized action for display on the display device.

13. (original) The method according to claim 8 further comprising the step of automatically and dynamically updating all referenced actions.

14. (previously presented) A system that receives DASE-compatible broadcast streams containing video, audio, or data components, or any combination thereof, and renders the component(s) in a manner useful to an end user, the system comprising:

a plurality of smart cards;

PSIP data preserved within a PSIP database, in which service information pertaining to the plurality of smart cards is stored as well as further service information provided by the system independent of the services of the plurality of the smart cards; and

a declarative application program interface configured to access the PSIP data, wherein the declarative application program interface comprises an XDMML application program interface module that introduces new tags having semantics that enable HTML pages to perform an active dynamic discovery of at least one of (i) content and (ii) services of a transport stream, wherein a render is configured to interpret and prepare the content of the transport stream for rendering on an output device.

15. (cancelled)

16. (previously presented) The system according to claim 14 wherein the system further includes means for mapping XDMML declarative applications to a Document Object Model (DOM), which is used to enable JavaScript access to the PSIP database.

17.-19. (cancelled)

20. (previously presented) The system according to claim 14 wherein the new tags include associated unique identification values to access content.

21. (previously presented) The system according to claim 14 wherein the content can be generated based on user-inputs.

22. (previously presented) The system according to claim 14, wherein the services comprise at least one of:

- (i) an electronic program guide;
- (ii) a weather reports;
- (iii) a stock market report;
- (iv) television commerce;
- (v) a game;
- (vi) interactive advertising;
- (vii) interactive news
- (viii) an interactive TV show;
- (ix) an interactive sports broadcast;
- (x) TV-gaming;
- (xi) TV-auctioning;
- (xii) email; and
- (xiii) web-browsing.

23. (previously presented) The method according to claim 8, wherein the services comprise at least one of:

- (i) an electronic program guide;
- (ii) a weather reports;
- (iii) a stock market report;
- (iv) television commerce;
- (v) a game;
- (vi) interactive advertising;
- (vii) interactive news
- (viii) an interactive TV show;
- (ix) an interactive sports broadcast;
- (x) TV-gaming;
- (xi) TV-auctioning;
- (xii) email; and
- (xiii) web-browsing.

24. (previously presented) A method of providing access to one or more services within a Digital TV Application Software Environment (DASE), the method comprising:

receiving a transport stream having content and one or more applications, wherein the one or more applications provide the one or more services within the Digital TV Application Software Environment (DASE);

using a renderer to interpret and prepare the content for rendering on a display device; and

using a declarative application program interface to access Program System Information Protocol (PSIP) data, wherein the declarative application program interface comprises an XDMML application program interface module that introduces tags having semantics that enable performance of an active dynamic discovery of at least one of (i) the content and (ii) the services.

25. (previously presented) A method as recited in claim 24, wherein the XDMML application program interface module includes a rule structure for:

defining a condition within a node;

upon satisfaction of the condition, realizing an action defined by a tag,

wherein the action is found within the PSIP data; and

otherwise, realizing an action defined by the node.

26. (previously presented) The method as recited in claim 25, further comprising the step of rendering the XDMML document based on the realized action.

27. (previously presented) The method as recited in claim 25, further comprising the step of rendering the realized action for display on the display device.

28. (previously presented) The method as recited in claim 25, further comprising the step of automatically and dynamically updating all referenced actions.

29. (previously presented) The method as recited in claim 24, wherein the services comprise at least one of:

- (i) an electronic program guide;
- (ii) a weather reports;
- (iii) a stock market report;
- (iv) television commerce;
- (v) a game;
- (vi) interactive advertising;
- (vii) interactive news
- (viii) an interactive TV show;
- (ix) an interactive sports broadcast;
- (x) TV-gaming;
- (xi) TV-auctioning;
- (xii) email; and
- (xiii) web-browsing.